UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/652,258	08/29/2003	Alexander Vaschillo	MS303849.1/MSFTP449US	1975

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EXAMINER
WOO, ISAAC M

ART UNIT	PAPER NUMBER
2166	

DATE MAILED: 07/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 June 2006*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-46* is/are pending in the application.

    4a) Of the above claim(s) *34-46* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 August 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1/16/2004*.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

DETAILED ACTION

1.   This action is in response to Applicant's Election in response to the

Election/Restriction requirement set forth in the June 26, 2006, filed on July 28, 2006.

2.   Applicant elected Group I, claims 1-33 with traverse, filed on June 26, 2006. The

applicant did not provide the ground(s) of the traversal. Thus, it is not found persuasive.

Therefore, the requirement is still deem proper.

3.   Claims 1-33 are presented for examination for this office action (Claims 34-46

are withdrawn).

Claim Objections

4.   Claims 2-23 and 25-33 are objected to because of the following informalities:

It is unclear how the limitations of dependent claims are incorporated into

independent claims. For example, claim 2 should have read: " The system of claim 1,

wherein the data is generated from relational database".

Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5.   Claims 1-33 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

As set forth in MPEP 2106 (II) (A):

A. Identify and Understand Any Practical Application Asserted for the Invention

The claimed invention as a whole must accomplish a practical application. That is, it must produce a "useful, concrete and tangible result." State Street, 149 F.3d at 1373, 47 USPQ2d at 1601-02. The purpose of this requirement is to limit patent protection to inventions that possess a certain level of "real world" value, as opposed to subject matter that represents nothing more than an idea or concept, or is simply a starting point for future investigation or research (Brenner v. Manson, 383 U.S. 519, 528-36, 148 USPQ 689, 693-96); In re Ziegler, 992, F.2d 1197, 1200-03, 26 USPQ2d 1600,1603-06 (Fed. Cir. 1993)). Accordingly, a complete disclosure should contain some indication of the practical application for the claimed invention, i.e., why the applicant believes the claimed invention is useful.

Apart from the utility requirement of 35 U.S.C. 101, usefulness under the patent eligibility standard requires significant functionality to be present to satisfy the useful result aspect of the practical application requirement. See Arrhythmia, 958 F.2d at 1057, 22 USPQ2d at 1036. Merely claiming nonfunctional descriptive material stored in a computer-readable medium does not make the invention eligible for patenting. For example, a claim directed to a word processing file stored on a disk may satisfy the

utility requirement of 35 U.S.C. 101 since the information stored may have

some "real world" value. However, the mere fact that the claim may satisfy

the utility requirement of 35 U.S.C. 101 does not mean that a useful result

is achieved under the practical application requirement. The claimed

invention as a whole must produce a "useful, concrete and tangible" result to

have a practical application.

Regarding claims 1 and 24, "A system that facilitating representing .....", includes *no physical structure of the machine in terms of its hardware or hardware and software combination.* Because "representing a relational database ..... component ..... " is computer program software function that are not embedded any a computer-readable medium and run by any a computer or machine. Therefore, the claims are not a statutory system and should be rejected under 35 U.S. C. § 101 as not being tangible.

Claim Rejections - 35 USC § 102

6.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7.   Claims 1-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Wetherbee (U.S. Patent No. 5,937,409).

With respect to claim 1, Wetherbee teaches, a system that facilitates representing a relational database in a different format (fig. 6, col. 10, lines 32-54), comprising a declarative description component (i.e., auto mapper, 500 in fig. 10A-B, col. 18, lines 53-67 to col. 19, lines 1-22) that facilitates generating data that represents the relational database (i.e., auto mapper generates data relationship, by relational mapper, 1110, in fig. 9, col. 16, lines 60-67 to col. 17, lines 1-51).

With respect to claim 2, Wetherbee teaches the data is generated from relational database schema information (col. 3, lines 6-41).

With respect to claim 3, Wetherbee teaches the schema information is in the form of metadata (col. 3, lines 6-41).

With respect to claim 4, Wetherbee teaches the description component derives logical and physical information from the relational database (fig. 5, col. 10, lines 14-31).

With respect to claim 5, Wetherbee teaches the physical information is harvested directly from schema information of the relational database (fig. 5, col. 10, lines 14-31).

With respect to claim 6, Wetherbee teaches the logical information is generated with annotation information associated with the relational database (fig. 7, col. 11, lines 21-67).

With respect to claim 7, Wetherbee teaches the annotation information is

obtained at least one of manually by a user and automatically by the system (fig. 7, col.

11, lines 21-67).

With respect to claim 8, Wetherbee teaches the logical information describes a

relationship between at least two tables of the database (fig. 7, col. 11, lines 21-67).

With respect to claim 9, Wetherbee teaches the declarative description

component is based upon an XML syntax (col. 5, lines 11-63).

With respect to claim 10, Wetherbee teaches the data is segmented into smaller

data portions (fig. 7, col. 11, lines 21-67).

With respect to claim 11, Wetherbee teaches the data is segmented to allow

logical extensions thereof (fig. 7, col. 11, lines 21-67).

With respect to claim 12, Wetherbee teaches the data is a logical view of

metadata of the relational database (col. 4, lines 16-64).

With respect to claim 13, Wetherbee teaches the description component

generates the data with sufficient metadata to allow generation and/or execution of

create, read, update, and delete operations against the relational database (col. 4, lines

16-64).

With respect to claim 14, Wetherbee teaches the description component derives

physical information from the relational database to generate the data, which physical

information is regenerated each time the description component executes against the

database (col. 16, lines 60-67 to col. 17, lines 1-51).

With respect to claim 15, Wetherbee teaches the data is updated by executing

the description component against the database to overwrite the data (col. 16, lines 60-

67 to col. 17, lines 1-51).

With respect to claim 16, Wetherbee teaches the updated data preserves user-

supplied extensions (col. 16, lines 60-67 to col. 17, lines 1-51).

With respect to claim 17, Wetherbee teaches an application using the data

initiates an update process of the data (col. 16, lines 60-67 to col. 17, lines 1-51).

With respect to claim 18, Wetherbee teaches a classification component that

performs an automated function (col. 4, lines 16-64).

With respect to claim 19, Wetherbee teaches the automated function determines

at least one of when the data will be updated and what location will be updated (col. 4,

lines 16-64).

With respect to claim 20, Wetherbee teaches the classification component is a

support vector machine (col. 4, lines 16-64).

With respect to claim 21, Wetherbee teaches the automated function includes

annotating physical information representative of the database to generate logical

information (fig. 11, col. 19, lines 23-67 to col. 20, lines 1-37).

With respect to claim 22, Wetherbee teaches returning a degree of certainty that

annotation of the physical information is correct (fig. 11, col. 19, lines 23-67 to col. 20,

lines 1-37).

With respect to claim 23, Wetherbee teaches computer operating (fig. 13, col.

20, lines 37-67 to col. 21, lines 1-23).

With respect to claim 24, Wetherbee teaches system that represents a relational

schema of a relational database in a different format (fig. 6, col. 10, lines 32-54),,

comprising a declarative description component (i.e., auto mapper, 500 in fig. 10A-B,

col. 18, lines 53-67 to col. 19, lines 1-22) that receives the relational schema in the form

of metadata (i.e., metadata 185, fig. 1, col. 4, lines 42-64, col. 19, lines 23-54) and

generates a data file representative of a logical view thereof (i.e., logical relational

tables in fig 5A, col. 9, lines 32-67 to col. 10, lines 1-13).

With respect to claim 25, Wetherbee teaches the description component derives

logical and physical information from the metadata, which physical information is

derived directly from the metadata, and which logical information includes annotations

of the physical information (i.e., logical relational tables in fig 5A, col. 9, lines 32-67 to

col. 10, lines 1-13).

With respect to claim 26, Wetherbee teaches the annotation information is added

incrementally (col. 9, lines 32-67 to col. 10, lines 1-13).

With respect to claim 27, Wetherbee teaches the data file is segmented into

smaller data tiles to allow logical extensions thereof (col. 3, lines 7-41).

With respect to claim 28, Wetherbee teaches the data file is stored local to the

database (col. 3, lines 7-41).

With respect to claim 29, Wetherbee teaches the declarative description

component runs against the relational database from a location remote from the

relational database (col. 16, lines 60-67 to col. 17, lines 1-51).

With respect to claim 30, Wetherbee teaches the relational database is

distributed across at least two network locations such that the description component

runs against each location database to generate respective data files (fig. 13, col. 20,

lines 38-67 to col. 21, lines 1-38).

With respect to claim 31, Wetherbee teaches the respective data files are

retrieved and processed to reconstruct the relational database (fig. 13, col. 20, lines 38-

67 to col. 21, lines 1-38).

With respect to claim 32, Wetherbee teaches the data files are retrieved and

processed by corresponding applications in a disconnected environment (col. 20, lines

38-67 to col. 21, lines 1-38).

With respect to claim 33, Wetherbee teaches the format is one of

implementation-neutral and implementation-specific (fig. 6, col. 10, lines 32-54).
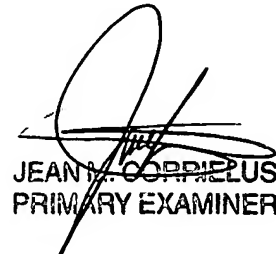
Conclusion

8.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isaac M. Woo whose telephone number is (571) 272-4043. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam can be reached on (571) 272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

IW
July 12, 2006

JEAN M. CORNIELUS
PRIMARY EXAMINER